## REMARKS

## Status of the Application

In the Office Action, claims 1-10 were rejected. In the present response, no amendments, deletions, or additions are being made to the claims so that claims 1-10 are pending.

## Rejection Under 35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,646,236 to Schafheutle et al.

Specifically, the Examiner asserts that Schafheutle "is directed to a polyester and its use as an additive in a coating composition", wherein "the coating composition is a cationic electrodeposition coating composition in a quantity of from 0.1 to 5 wt.% based on the resin solids composition (col. 5, lines 41-58); the polyester has an acid value of less than 35 mg KOH/g (paragraph crossing cols. 4 and 5 and col. 2, lines 14-43); and the polyester [is] obtained by reacting different and long hydrocarbon components (col. 1, lines 55-65 and col. 2, line 66 through col. 3, line 65)." The Examiner concludes that as "the reference discloses numerical ranges of the additive that touch, overlap, or lie within the claimed range", "the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because overlapping ranges have been held to be obvious."

The Examiner asserts that claims 6 and 8 "would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference's teachings because it has been settled that proper adjustment of a known effective variable of a known or obvious process is within the capabilities of one having ordinary skill in the art."

Applicants, however, respectfully assert that Schafheutle does not teach or suggest ALL of the limitations of Applicant's claimed invention, and therefore the Examiner has failed to establish a *prima facie* case of obviousness. As the Examiner is aware, Section 2143.03 of the MPEP

indicates that "all the claim limitations must be taught or suggested by the prior art" to establish a *prima facie* case of obviousness.

While the Examiner asserts that Schafheutle discloses a polyester having an acid value of less than 35 mg KOH/g, a closer reading of column 4, line 65 through column, 5 line 24 indicates that Schafheutle is in fact referring to the acid number of an <u>acidic intermediate polyester</u>, and NOT to the acid number of the final polyester that is actually being formed and added to the cathodic electrocoats prepared therein. In fact, the acidic intermediate polyester of Schafheutle is reacted with the amino group-containing component (F) and, if desired, component (H), wherein the carboxyl groups of the intermediate polyester are consumed by the amine groups of components (F) and, if desired, (H). The resulting end product has an <u>amine number</u> of from 25 to 35 mg of KOH/g, and is further processed by being neutralized with, for example, formic acid and then adjusted to a solids content of, for example, from about 30 to 35% by having water added thereto.

Examples 1-3 further illustrate the polyester forming process disclosed at columns 4-5. Indeed, the final polyester produced in each of the examples 1-3 is an amino-group containing polyester having an acid number below 1 mg of KOH/g. In Examples 1 and 2, the end product is neutralized with formic acid so as to produce amine-group containing polyesters that are water soluble.

As a result, Schafheutle discloses an amine group containing <u>cationic</u> polyester that has an acidic number below 1 mg KOH/g and an amine number between 25-35 mg KOH/g, and does not disclose the claimed acidic <u>anionic</u> polyester having an acid value of 20 to 100 mg KOH/g of Applicants. As Schafheutle fails to disclose a final polyester additive having an acid value of 20 to 100mg KOH/g as claimed by Applicants, Schafheutle has failed to disclose every limitation of Applicants' claimed invention. As a result, the Examiner has failed to establish a *prima facie* case of obviousness. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections as to claims 1-10, and allow the case.

Se. No. 10/043,745 Docket No. FA 1025 US NA

Dated: <u>July 9, 2004</u>

## SUMMARY

In view of the foregoing remarks, Applicants respectfully submit that the application is in condition for allowance, and therefore respectfully solicit a Notice of Allowance. In order to expedite disposition of the case, the Examiner is invited to contact Applicants' representative at the telephone number below to resolve any remaining issues. Should there be a fee due that is unaccounted for, please charge such fee to Deposit Account No. 04-1928 (E.I. du Pont de Nemours and Company).

Respectfully submitted,

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